

=> d his

(FILE 'HOME' ENTERED AT 11:50:04 ON 19 AUG 2004)

FILE 'CAPLUS' ENTERED AT 11:50:15 ON 19 AUG 2004  
L1 STRUCTURE UPLOADED  
S L1

FILE 'REGISTRY' ENTERED AT 11:50:44 ON 19 AUG 2004  
L2 13 S L1

FILE 'CAPLUS' ENTERED AT 11:50:45 ON 19 AUG 2004  
L3 12 S L2

FILE 'STNGUIDE' ENTERED AT 11:52:47 ON 19 AUG 2004

FILE 'CAPLUS' ENTERED AT 11:55:21 ON 19 AUG 2004

=> file caplus  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
FULL ESTIMATED COST ENTRY SESSION  
0.46 63.14  
  
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL  
CA SUBSCRIBER PRICE ENTRY SESSION  
0.00 -8.82

FILE 'CAPLUS' ENTERED AT 11:55:38 ON 19 AUG 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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FILE COVERS 1907 - 19 Aug 2004 VOL 141 ISS 8  
FILE LAST UPDATED: 18 Aug 2004 (20040818/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l1 full  
REGISTRY INITIATED  
Substance data SEARCH and crossover from CAS REGISTRY in progress...  
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 11:55:50 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 27503 TO ITERATE

100.0% PROCESSED 27503 ITERATIONS 543 ANSWERS  
SEARCH TIME: 00.00.01

L4 543 SEA SSS FUL L1

L5 134 L4

=> s 15 and (halo? fluor?)  
354051 HALO?  
1023157 FLUOR?  
1332 HALO? FLUOR?  
(HALO? (W) FLUOR?)  
L6 0 L5 AND (HALO? FLUOR?)

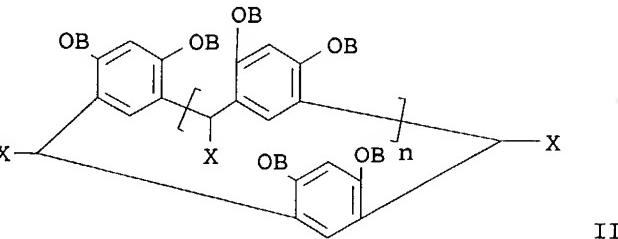
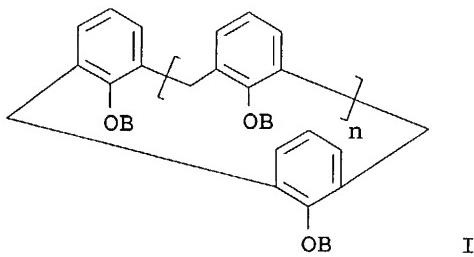
=> s 15 and (halogen)  
100468 HALOGEN  
L7 4 L5 AND (HALOGEN)

=> d 1-4 ibib abs hitstr

L7 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2003:870678 CAPLUS  
DOCUMENT NUMBER: 139:371613  
TITLE: Light-emitting compositions containing calixarenes or calixresorcinarenes suitable for preparation of electroluminescent devices  
INVENTOR(S): Takahashi, Naoto; Hyakuta, Junji; Kawabata, Yuichiro  
PATENT ASSIGNEE(S): Tokuyama Corp., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003313546	A2	20031106	JP 2002-122730	20020424
PRIORITY APPLN. INFO.:			JP 2002-122730	20020424
OTHER SOURCE(S):	MARPAT	139:371613		

GI



AB The compns. contain 0.1-90 weight% calixarenes or calixresorcinarenes having light-emitting organic groups or charge-transferring organic groups and 10-99.9 weight% vinylcarbazole. The preferable structures for calixarenes or calixresorcinarenes are A substituted on each benzene ring of I or II (A,

T . B, X = H, halogen, alkyl, aryl, alkoxy with  $\geq 1$  of A, B,  
and X being YmZ; Y = bivalent organic group; Z = light-emitting organic group,  
charge-transferring organic group; m = 0, 1; n = integer of 1-18).

546632-74-0P

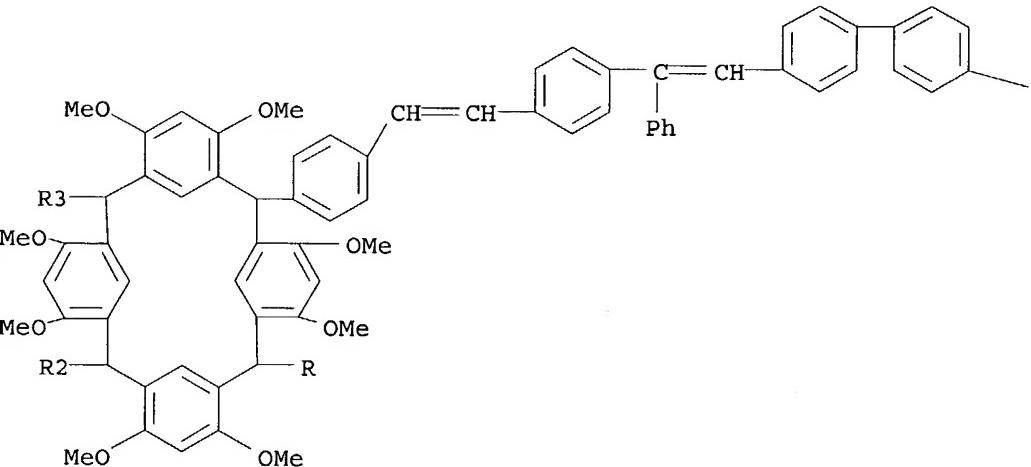
RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)

(light-emitting calixarene or calixresorcinarene compns. for  
electroluminescent devices)

546632-74-0 CAPLUS

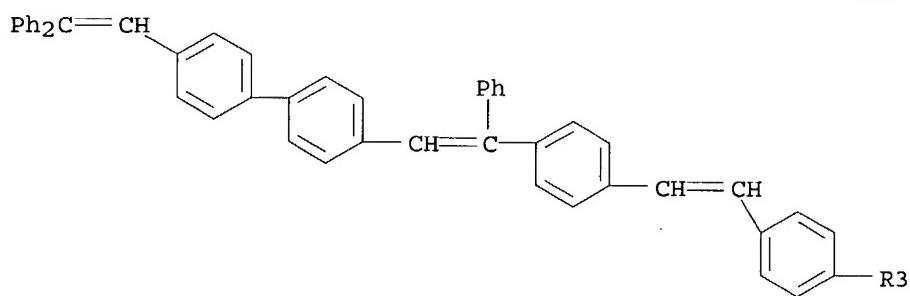
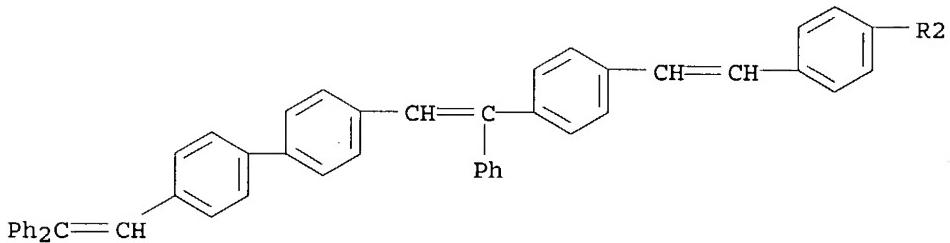
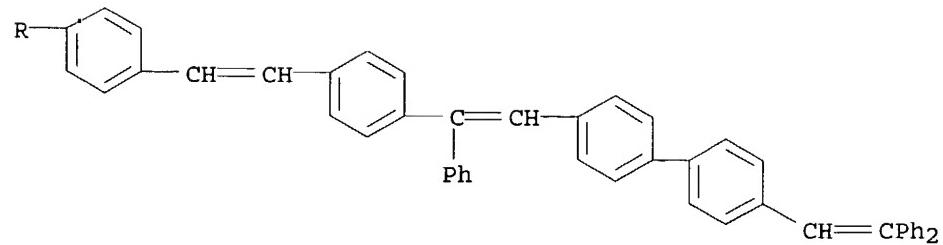
N Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),1  
CN 5,17,19(26),21,23-dodecaene, 2,8,14,20-tetrakis[4-[2-[4-[2-[4'-(2,2-  
diphenylethenyl)[1,1'-biphenyl]-4-yl]-1-phenylethenyl]phenyl]ethenyl]phenyl  
1]-4,6,10,12,16,18,22,24-octamethoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

$\sim \text{CH}=\text{CPh}_2$

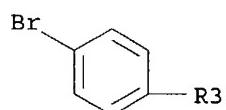
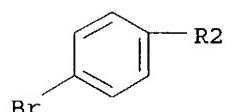
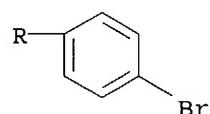
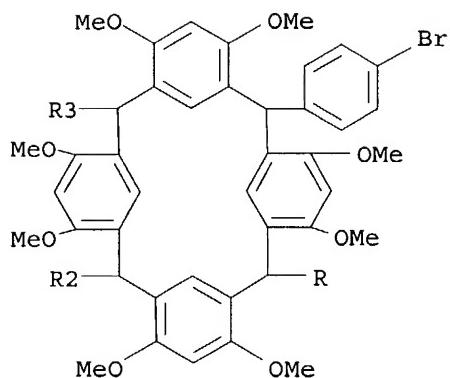


546631-70-3 546632-68-2 546632-71-7

RL: RCT (Reactant); RACT (Reactant or reagent)  
(light-emitting calixarene or calixresorcinarene compns. for  
electroluminescent devices)

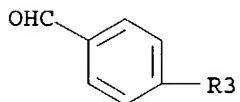
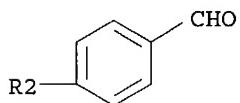
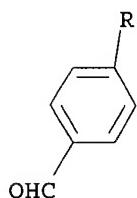
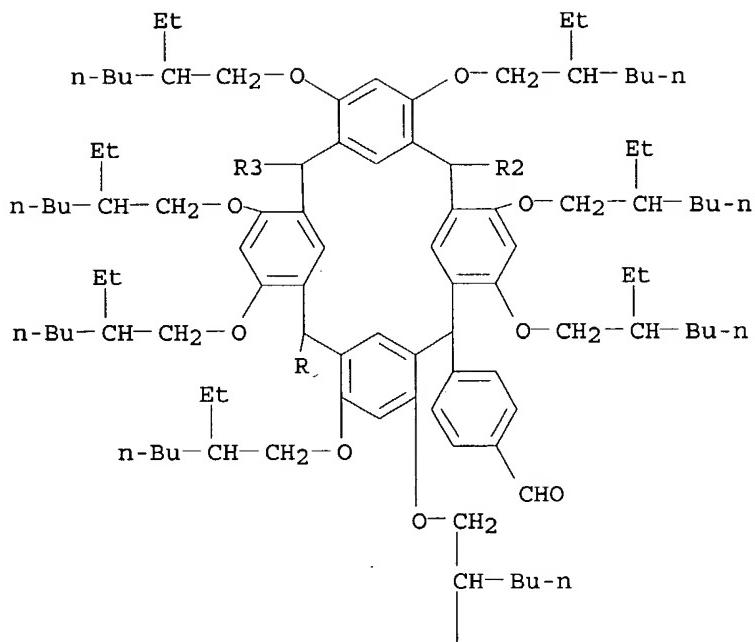
546631-70-3 CAPLUS

Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),1  
5,17,19(26),21,23-dodecaene, 2,8,14,20-tetrakis(4-bromophenyl)-  
4,6,10,12,16,18,22,24-octamethoxy- (9CI) (CA INDEX NAME)



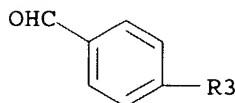
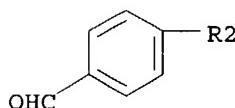
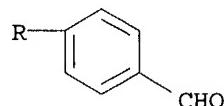
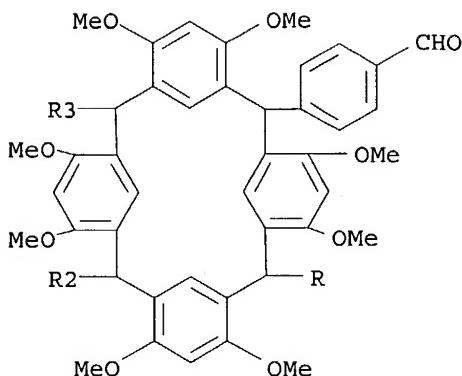
I 546632-68-2 CAPLUS

I Benzaldehyde, 4,4',4'',4'''-[4,6,10,12,16,18,22,24-octakis[(2-  
I ethylhexyl)oxy]pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-  
I 1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-2,8,14,20-  
I tetrail]tetrakis- (9CI) (CA INDEX NAME)



546632-71-7 CAPLUS

Benzaldehyde, 4,4',4'',4'''-(4,6,10,12,16,18,22,24-octamethoxypentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-2,8,14,20-tetrayl)tetraakis- (9CI) (CA INDEX NAME)



ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN  
 CESSON NUMBER: 2003:300651 CAPLUS  
 CUMENT NUMBER: 138:326558  
 TLE: Preparation of hexameric calixarene-type complexes and  
 their use for encapsulation of pharmaceutically active  
 agents  
 VENTOR(S): Atwood, Jerry L.  
 TENT ASSIGNEE(S): USA  
 URCE: U.S. Pat. Appl. Publ., 14 pp.  
 CUMENT TYPE: Patent  
 NGUAGE: English  
 MILY ACC. NUM. COUNT: 1  
 TENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003073872	A1	20030417	US 2001-978925	20011016
WO 2003033649	A2	20030424	WO 2002-US30460	20020925
WO 2003033649	A3	20030703		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,			

CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,  
NE, SN, TD, TG

PRIORITY APPLN. INFO.: :

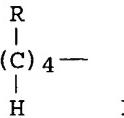
US 2001-978925

A 20011016

OTHER SOURCE(S):

MARPAT 138:326558

I



3 The invention relates to a composition I [wherein Ar = trihydroxybenzene radical; R = (alkyl)aryl group containing 6-20 C atoms, an aliphatic group containing 2-20 C atoms, or a substituted aliphatic or (alkyl)aryl group having a substituent of carbonyl, carboxyl, amide, halide, ester, or hydroxyl group], comprising a highly stable guest/host assembly having a spheroidal host assembly comprised of a hexamer of a methylene-bridged trihydroxybenzene tetramer and a guest component encapsulated within the spheroidal host assembly. The invention also relates to a guest component, specifically a pharmaceutically active agent, that is encapsulated within the spheroidal host assembly and is stable upon a solubilization in a 1:1 mixture of acetone and H<sub>2</sub>O for one day at 37°. The pharmaceutically active agent encapsulated within the spheroidal hexamer may be Depakote, Wellbutrin, Allegra, Neurontin, Zovirax, or Claritin. Another aspect of the invention provides for a process for the preparation of a hexameric complex from a methylene-bridged tetramer solubilized in an amphiphilic organic solvent. An activator, comprising an organic compound of a lower mol. weight than that of the tetramer which is functionalized with at least one of an acidic group, halogen, amino group, amido group, ester group, or hydroxy group, is incorporated into the amphiphilic solvent containing the tetramer. The tetramer may be prepared from an aldehyde and pyrogallol which are reacted under conditions to produce a condensation product of the methylene-bridged cyclic tetramer. For example, stepwise addition of concentrated HCl and propionaldehyde to a solution of pyrogallol in 95% EtOH, followed by stirring for 12 h afforded I (R = Et).

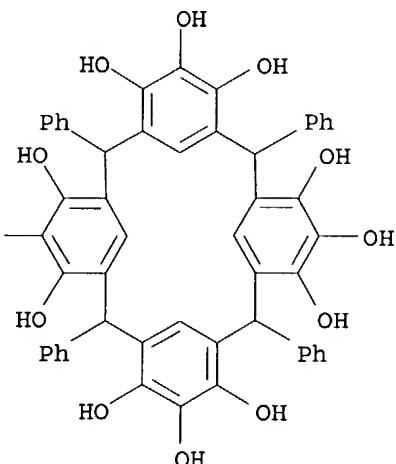
512785-41-0P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(hexameric capsule; preparation of hexameric calixarene-type complexes and their use for encapsulation of pharmaceutically active agents)

512785-41-0 CAPLUS

Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,5,6,10,11,12,16,17,18,22,23,24-dodecol, 2,8,14,20-tetraphenyl- (9CI) (CA INDEX NAME)



7 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN  
 CCESSION NUMBER: 1995:828347 CAPLUS  
 DOCUMENT NUMBER: 123:241910  
 TITLE: Friction charge-providing member for positively-chargeable toner.  
 INVENTOR(S): Mukudai, Osamu; Matsuura, Yuuji; Niimura, Isao;  
 ATENT ASSIGNEE(S): Watanabe, Kayoko; Iwasa, Keiko  
 SOURCE: Hodogaya Chemical Co., Ltd., Japan  
 EUR. Pat. Appl., 22 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 ATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 655658	A2	19950531	EP 1994-105509	19940408
EP 655658	A3	19960703		
R: DE, FR, GB				
JP 07128916	A2	19950519	JP 1993-293798	19931101
JP 08262871	A2	19961011	JP 1994-93926	19940408
PRIORITY APPLN. INFO.:			JP 1993-293798	19931101
OTHER SOURCE(S):	MARPAT 123:241910			

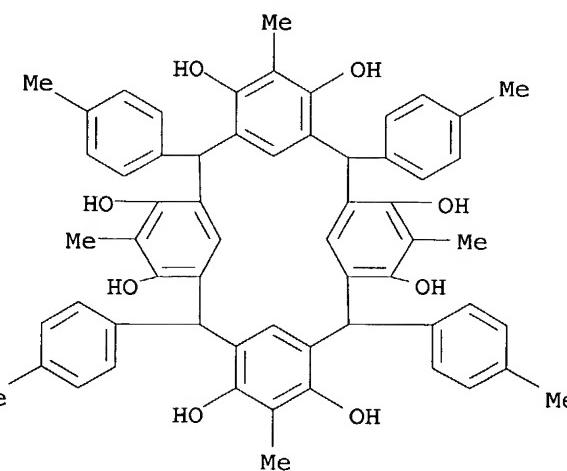
I For diagram(s), see printed CA Issue.  
 B A friction charge-providing member for pos.-chargeable toner comprises a parent material and a charge-controlling agent on the surface selected from I and II [A and B = H, halogen, alkoxy, carboxyl, hydroxyl, ester, nitro, amino, alkylamino, alkyl which may contain a substituent(s) or a Ph group which may contain a substituent(s); R = H, alkyl or Ph or naphthyl group which may contain a substituent(s); m = an integer 2 to 16; and n = an integer 4 to 8]. The toner provides improved charging stability.

168405-65-0

RL: TEM (Technical or engineered material use); USES (Uses)  
 (charge-controlling agent for electrostatog. toner)

168405-65-0 CAPLUS

Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol,  
 5,11,17,23-tetramethyl-2,8,14,20-tetrakis(4-methylphenyl)- (9CI) (CA INDEX NAME)



7 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN  
 CCESSION NUMBER: 1995:794919 CAPLUS  
 DOCUMENT NUMBER: 123:325712  
 TITLE: Electrostatic image developing toner.  
 INVENTOR(S): Mukudai, Osamu; Matsuura, Yuuji; Niimura, Isao;

PATENT ASSIGNEE(S) :

Watanabe, Kayoko; Isawa, Keito  
Hodogaya Chemical Co., Ltd., Japan  
Eur. Pat. Appl., 22 pp  
CODEN: EPXXDW

SOURCE: ..

DOCUMENT TYPE:

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 651294	A1	19950503	EP 1994-105508	19940408
EP 651294	B1	19980708		
R: DE, FR, GB				
JP 07175269	A2	19950714	JP 1994-93927	19940408
US 5679489	A	19971021	US 1996-620150	19960322
			JP 1993-293799	19931101
PRIORITY APPLN. INFO.:			US 1994-224523	19940407

OTHER SOURCE(S) : MARPAT 123:325712

GI For diagram(s), see printed CA Issue.

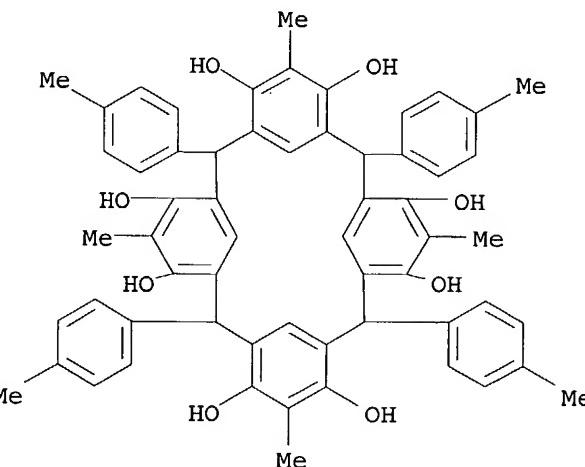
AB An electrophotog. toner free of metal such as Cr comprises  $\geq 1$  charge-controlling agent selected from I and II [A, B = H, halogen, alkoxy carboxyl, OH, ester, nitro, amino, alkylamino, alkyl, Ph; R = H, alkyl, Ph, naphthyl; m = 2-16; n = 4-8]. The toner shows no deterioration during preparation, excellent stability, excellent dispersibility in binder resin, and excellent friction chargeability.

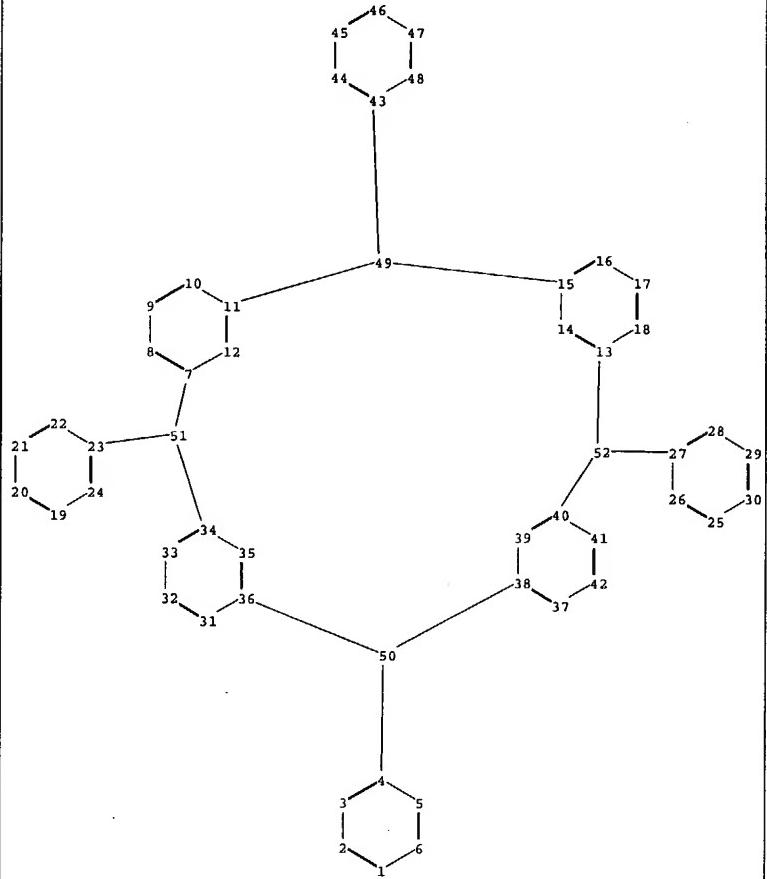
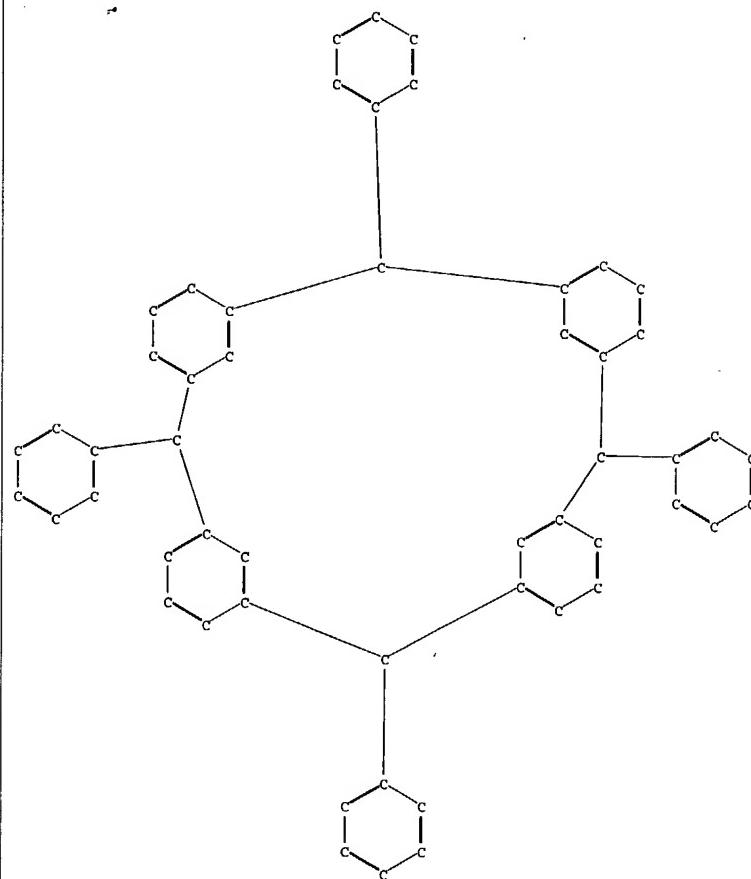
IT 168405-65-0

RL: MOA (Modifier or additive use); USES (Uses)  
(charge-controlling agent for electrophotog. toners)

RN 168405-65-0 CAPLUS

CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),1  
5,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol,  
5,11,17,23-tetramethyl-2,8,14,20-tetrakis(4-methylphenyl)- (9CI) (CA  
INDEX NAME)





ring nodes :

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48		
49	50	51	52																					

chain bonds :

4-50 23-51 27-52 43-49

ring bonds :

1-2	1-6	2-3	3-4	4-5	5-6	7-8	7-12	7-51	8-9	9-10	10-11	11-12	11-49	13-14	13-18
13-52	14-15	15-16	15-49	16-17	17-18	19-20	19-24	20-21	21-22	22-23	23-24	25-26			
25-30	26-27	27-28	28-29	29-30	31-32	31-36	32-33	33-34	34-35	34-51	35-36	36-50			
37-38	37-42	38-39	38-50	39-40	40-41	40-52	41-42	43-44	43-48	44-45	45-46	46-47			
47-48															

exact/norm bonds :

7-51 11-49 13-52 15-49 34-51 36-50 38-50 40-52

exact bonds :

4-50 23-51 27-52 43-49

normalized bonds :

1-2	1-6	2-3	3-4	4-5	5-6	7-8	7-12	8-9	9-10	10-11	11-12	13-14	13-18	14-15
15-16	16-17	17-18	19-20	19-24	20-21	21-22	22-23	23-24	25-26	25-30	26-27	27-28		
28-29	29-30	31-32	31-36	32-33	33-34	34-35	35-36	37-38	37-42	38-39	39-40	40-41		
41-42	43-44	43-48	44-45	45-46	46-47	47-48								

Match level :

1:Atom	2:Atom	3:Atom	4:Atom	5:Atom	6:Atom	7:Atom	8:Atom	9:Atom	10:Atom	11:Atom
12:Atom	13:Atom	14:Atom	15:Atom	16:Atom	17:Atom	18:Atom	19:Atom	20:Atom	21:Atom	
22:Atom	23:Atom	24:Atom	25:Atom	26:Atom	27:Atom	28:Atom	29:Atom	30:Atom	31:Atom	
32:Atom	33:Atom	34:Atom	35:Atom	36:Atom	37:Atom	38:Atom	39:Atom	40:Atom	41:Atom	
42:Atom	43:Atom	44:Atom	45:Atom	46:Atom	47:Atom	48:Atom	49:Atom	50:Atom	51:Atom	

SAMPLE SEARCH INITIATED 11:50:44 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 1336 TO ITERATE

74.9% PROCESSED 1000 ITERATIONS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

13 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 24528 TO 28912  
PROJECTED ANSWERS: 97 TO 597

L2 13 SEA SSS SAM L1

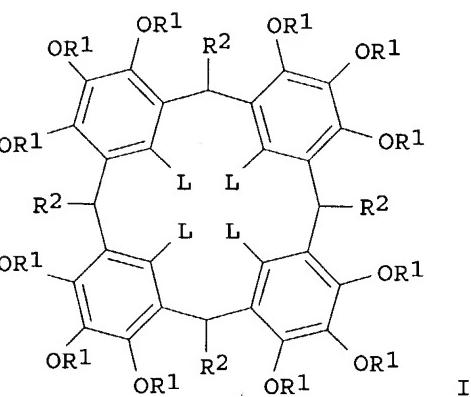
L3 12 L2

=> d 1-12 ibib abs hitstr

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2003:947709 CAPLUS  
DOCUMENT NUMBER: 140:16573  
TITLE: Preparation of calixarene-derivatives having  
anti-viral activity  
INVENTOR(S): Coveney, Donal; Costello, Benjamin  
PATENT ASSIGNEE(S): Aids Care Pharma, Limited, Ire.  
SOURCE: Eur. Pat. Appl., 22 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1367044	A1	20031203	EP 2003-76538	20030521
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			EP 2003-76538	20030521
OTHER SOURCE(S):	CASREACT 140:16573; MARPAT 140:16573			

GI



AB The patent relates to the preparation of compds. I wherein at least one R1 = H and the remainder = CH<sub>2</sub>CO<sub>2</sub>K; R2 = 4-fluorophenyl; and L = H. The compds.

are useful as pharmaceutical compns. in the treatment of AIDS. Thus, a pyrogallol calixarene derivative prepared by reacting pyrogallol and p-fluorobenzaldehyde to form pyrogallol calixarene; treated with potassium carbonate and Et bromoacetate; and followed by hydrolysis gave EC<sub>50</sub> of 1.25 μM compared to 0.5-1.0 for the control (AC-1) in HIV-1 antiviral assay.

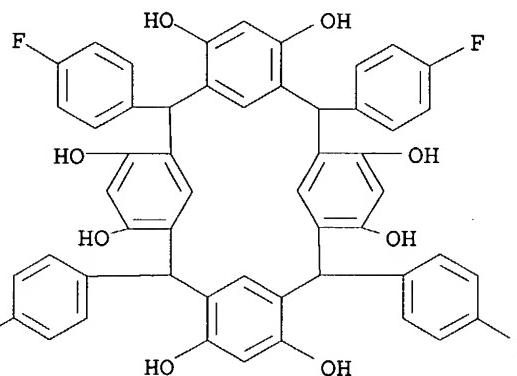
IT 629614-96-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of calixarene-derivs. having anti-viral activity)

RN 629614-96-6 CAPLUS

CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),1  
5,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol,  
2,8,14,20-tetrakis(4-fluorophenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:913398 CAPLUS

DOCUMENT NUMBER: 137:278960

TITLE: Solvent-free synthesis of calix[4]resorcinarenes

AUTHOR(S): Roberts, Brett A.; Cave, Gareth W. V.; Raston, Colin L.; Scott, Janet L.

CORPORATE SOURCE: Centre for Green Chemistry, Monash University, 3800, Australia

SOURCE: Green Chemistry (2001), 3(6), 280-284

PUBLISHER: CODEN: GRCHFJ; ISSN: 1463-9262

DOCUMENT TYPE: Royal Society of Chemistry

LANGUAGE: Journal

OTHER SOURCE(S): English

CASREACT 137:278960

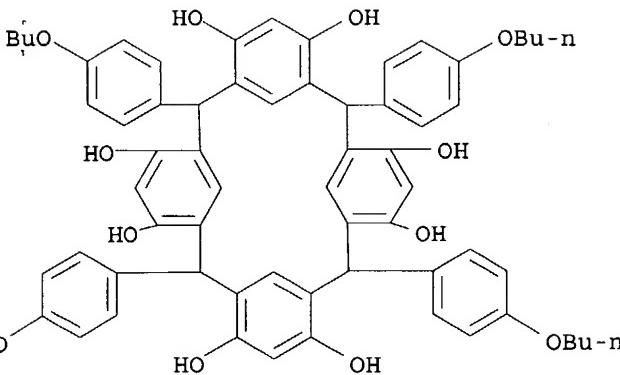
AB Calix[4]resorcinarenes may be prepared in high yield and purity by direct reaction of resorcinol and benzaldehyde derivs. in the presence of a catalytic amount of solid acid and at ambient temperature under solvent-free conditions. This represents a viable alternative to traditional solution phase methodol. The solvent-free method measures up well with respect to energy usage, solvent wastes and associated hazards, reaction time and yield. In addition, the relevant benzaldehyde derivs. are prepared in polypropylene glycol, which is readily recycled.

IT 464885-60-7P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and crystal structure of calix[4]resorcinarenes via  
cyclocondensation of arylaldehydes with resorcinol under solvent-free  
conditions)

RN 464885-60-7 CAPLUS

CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),1  
5,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol,  
2,8,14,20-tetrakis(4-butoxyphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

SESSION NUMBER: 2001:765663 CAPLUS

DOCUMENT NUMBER: 136:69555

ABSTRACT: A vibrational spectroscopic study of clathrates of resorcarene-based cavitands

AUTHOR(S): Dormann, Jorg; Ruoff, Andreas; Schatz, Jurgen; Middel, Oskar; Verboom, Willem; Reinhoudt, David N.

PUBLISHER SOURCE: Section of Vibrational Spectroscopy, University of Ulm, Ulm, D-89069, Germany

PERIODICAL: Journal of Physical Organic Chemistry (2001), 14(10), 704-708

CODEN: JPOCEE; ISSN: 0894-3230

PUBLISHER: John Wiley & Sons Ltd.

ITEM TYPE: Journal

PAGE: English

By comparison of the fully assigned vibrational spectra obtained for resorcarene-based cavitands, their clathrates with toluene and ethanol resp., and free guest mols., good structural models for the clathrates could be obtained merely based on Fourier transform IR data. Using this technique, various different interactions between the host and guest in the solid state as well as the orientation of the included guest could be identified. In the case of one cavitand, the model obtained by this methodol. could be validated by comparison with an exptl. crystal structure anal.

384379-14-0

RL: PRP (Properties)

(IR study on clathrates of resorcarene-based cavitands)

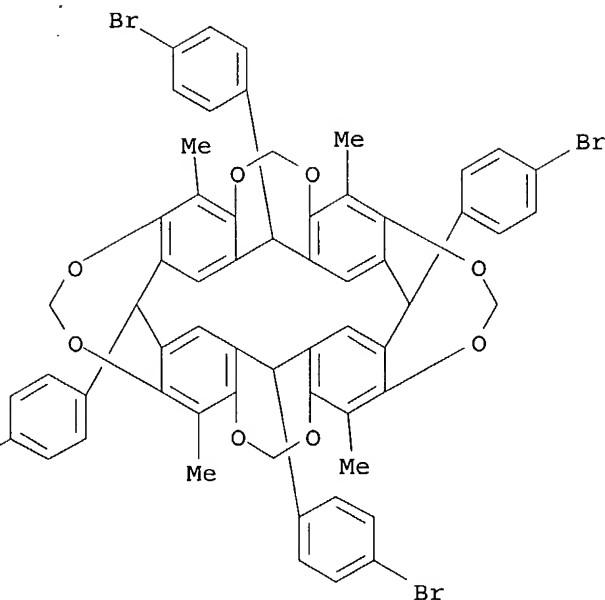
384379-14-0 CAPLUS

2,20:3,19-Dimetheno-1H,21H,23H,25H-bis[1,3]dioxocino[5,4-i:5',4'-i']benzo[1,2-d:5,4-d']bis[1,3]benzodioxocin, 1,21,23,25-tetrakis(4-bromophenyl)-7,11,15,28-tetramethyl-, stereoisomer, compd. with methylbenzene (1:4) (9CI) (CA INDEX NAME)

CM 1

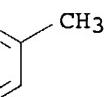
CRN 216760-27-9

CMF C60 H44 Br4 O8



CM 2

CRN 108-88-3  
CMF C7 H8



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
 SESSION NUMBER: 2001:656593 CAPLUS  
 JOURNAL NUMBER: 135:371514  
 LE:  
 Novel resorcin[4]arenes as potassium-selective ion-channel and transporter mimics  
 Wright, Angela J.; Matthews, Susan E.; Fischer, Wolfgang B.; Beer, Paul D.  
 JOURNAL(S):  
 Department of Chemistry, Inorganic Chemistry Laboratory, University of Oxford, Oxford, OX1 3QR, UK  
 PORATE SOURCE: Chemistry--A European Journal (2001), 7(16), 3474-3481  
 RCE:  
 CODEN: CEUJED; ISSN: 0947-6539  
 PUBLISHER: Wiley-VCH Verlag GmbH  
 JOURNAL TYPE: Journal  
 LANGUAGE: English

A series of novel resorcin[4]arenes with extended π systems have been synthesized and developed as potassium-selective transporters. Resorcin[4]arenes that feature crown ether moieties function as efficient carriers of K<sup>+</sup> across bulk liquid membranes showing enhanced selectivity over the other alkali metal ions relative to a model system (benzo[15]crown-5). Incorporation of functionalities suitable for pore formation, in addition to an extra annulus of aromatic residues, gives mols. which have remarkable ion-channel-mimicking behavior in a biol. lipid bilayer with outstanding K<sup>+</sup>/Na<sup>+</sup> selectivity.

374106-11-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of resorcin[4]arenes and activity as potassium-selective ion-channel and transporter mimics)

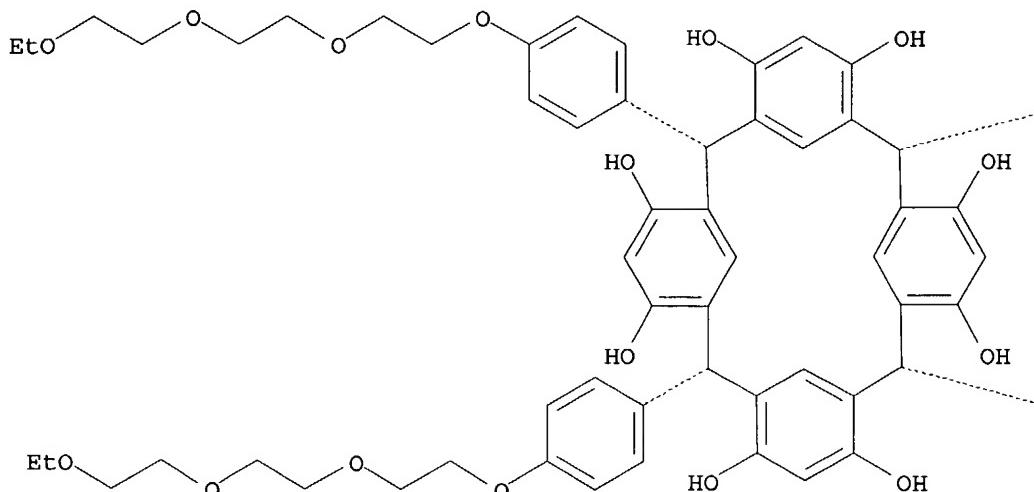
374106-11-3 CAPLUS

Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),1

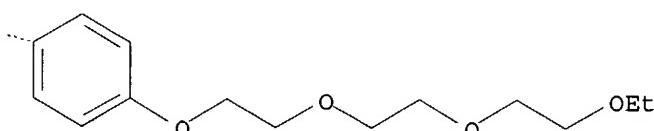
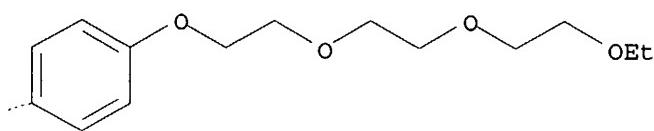
5,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol,  
2,8,14,20-tetrakis[4-[2-[2-(2-ethoxyethoxy)ethoxy]ethoxy]phenyl]-,  
stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1999:513131 CAPLUS  
DOCUMENT NUMBER: 131:293195  
TITLE: Novel dissolution inhibitors based on calixarene derivatives for use in chemical amplification resists  
AUTHOR(S): Ito, Hiroshi; Nakayama, Tomonari; Ueda, Mitsuru;  
Sherwood, Mark; Miller, Dolores  
CORPORATE SOURCE: IBM Almaden Research Center, San Jose, CA, 95120, USA  
SOURCE: Polymeric Materials Science and Engineering (1999),  
81, 51-52  
PUBLISHER: CODEN: PMSEDG; ISSN: 0743-0515  
DOCUMENT TYPE: American Chemical Society  
LANGUAGE: Journal  
English

AB Calix[4]resorcinarenes were synthesized by condensing resorcinol with aldehydes (acetaldehyde, benzaldehyde, and 4-isopropylbenzaldehyde) and separated into C4v and C2v, isomers. All eight OH groups were protected with acid-labile groups such as tBOC and tBuOCOCH<sub>2</sub>. The protected calixarenes have been found to be excellent dissoln. inhibitors for use in chemical amplification resists.

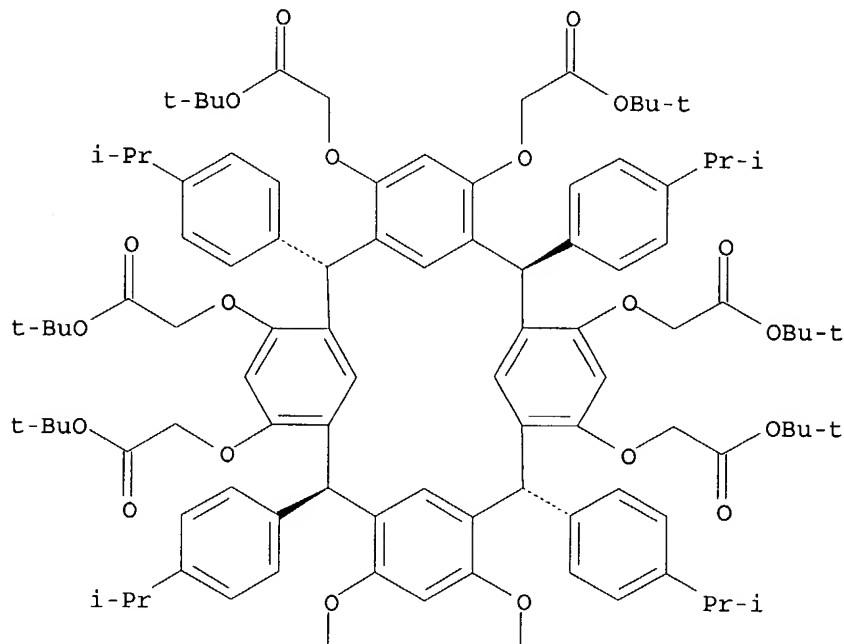
IT 246023-06-3P  
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(novel dissoln. inhibitors based on calix[4]resorcinarenes for use in chemical amplification resists)

RN 246023-06-3 CAPLUS

CN Acetic acid, 2,2',2'',2''',2'''',2''''',2'''''',2'''''''-[ [2,8,14,20-tetrakis[4-(1-methylethyl)phenyl]pentacyclo[19.3.1.13,7.19,13.115,19]octacos-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octayl]octakis(oxy)]octakis-, octakis(1,1-dimethylethyl) ester, stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:478017 CAPLUS

DOCUMENT NUMBER: 131:148528

TITLE: Application of water soluble resorcinarenes in nanofiltration-complexation with cesium and strontium as targets

AUTHOR(S): Nicod, Laurence; Chitry, Frederic; Gaubert, Eric; Lemaire, Marc; Barnier, Henri

CORPORATE SOURCE: Institut de Recherches sur la Catalyse, Laboratoire de Catalyse et Synthese Organique, Universite Claude Bernard, Villeurbanne, 69622, Fr.

SOURCE: Journal of Inclusion Phenomena and Macroyclic Chemistry (1999), 34(2), 141-151

PUBLISHER: Kluwer Academic Publishers  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Combined nanofiltration-complexation is applied to the separation of Cs and Sr from a solution containing a large concentration of Na. Cs and Sr complexation was studied using various water soluble resorcinarene-type ligands. Combined with nanofiltration these ligands improved the separation of Cs and Sr from Na by the Filmtec NF 70 membrane.

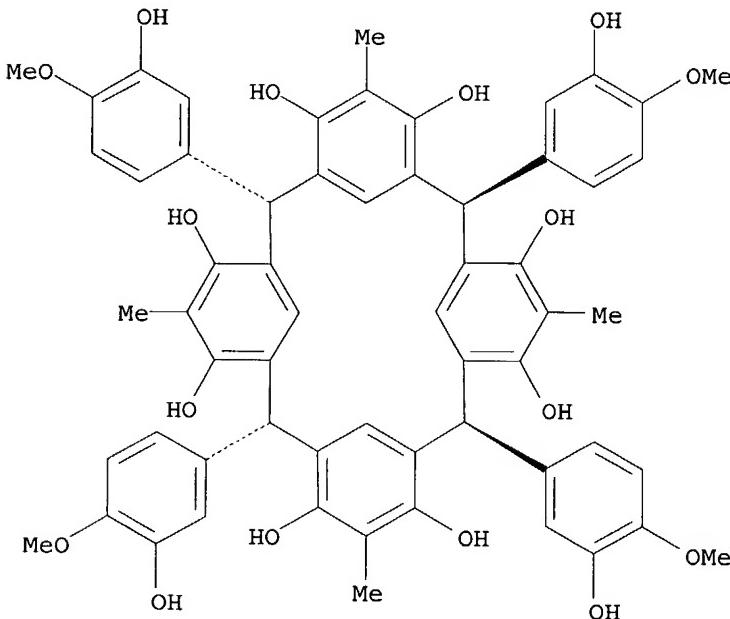
IT 235094-96-9

RL: NUU (Other use, unclassified); USES (Uses)  
(application of water soluble resorcinarenes in nanofiltration-complexation with cesium and strontium as targets)

RN 235094-96-9 CAPLUS

CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),1  
5,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol,  
2,8,14,20-tetrakis(3-hydroxy-4-methoxyphenyl)-5,11,17,23-tetramethyl-,  
stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:768661 CAPLUS

DOCUMENT NUMBER: 130:153434

TITLE: Rational Synthesis of Resorcarenes with Alternating Substituents at Their Bridging Methine Carbons  
Rumboldt, Giovanna; Boehmer, Volker; Botta, Bruno; Paulus, Erich F.

AUTHOR(S): Dipartimento di Studi di Chimica e Tecnologia delle Sostanze Biologicamente Attive, Universita La Sapienza, Rome, 00185, Italy

CORPORATE SOURCE: Journal of Organic Chemistry (1998), 63(26), 9618-9619

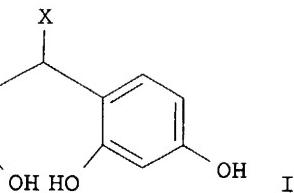
SOURCE: CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 130:153434



Resorcarenes bearing different aldehyde residues in alternating order were prepared by condensation of resorcinol-derived dimers I ( $X = \text{CH}_2\text{CH}_2\text{Ph}$ ,  $C_6\text{H}_4\text{NO}_2\text{-}4$ ) with 4-hydroxybenzaldehyde or propanal. Stereoisomers were obtained by chromatog. or by acetylation with subsequent chromatog.

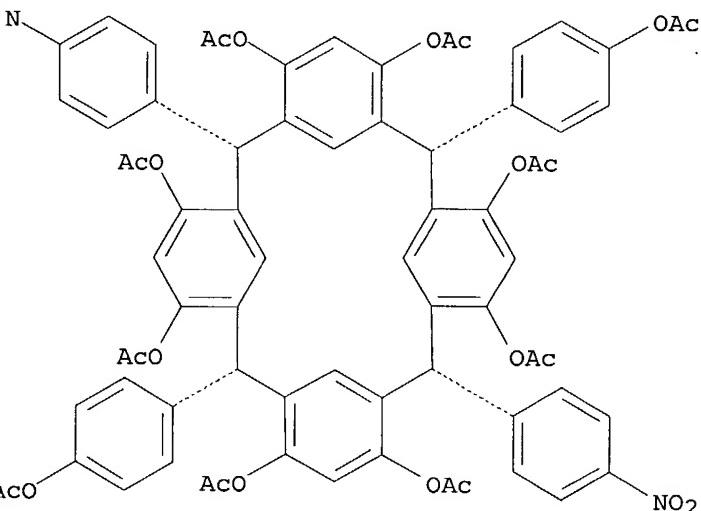
**220213-30-9P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of resorcarenes with alternating substituents at methine bridges)

**220213-30-9 CAPLUS**

Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol,  
2,14-bis[4-(acetoxy)phenyl]-8,20-bis(4-nitrophenyl)-, octaacetate  
(ester), stereoisomer (9CI) (CA INDEX NAME)

relative stereochemistry.



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 8 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

CESSION NUMBER: 1998:664722 CAPLUS

CUMENT NUMBER: 130:25128

TLE: Phosphacavitands: I. Phosphorylation of calix[4]resorcinolarenes with phosphorous amides. Synthesis of first cavitands derived from phosphoramidites

THOR(S): Maslennikova, V. I.; Shkarina, E. V.; Vasyanina, L. K.; Lysenko, K. A.; Antipin, M. Yu.; Nifant'ev, E. E.

RPORTATE SOURCE: Moscow State Pedagogical University, Moscow, Russia  
URCE: Russian Journal of General Chemistry (Translation of Zhurnal Obshchei Khimii) (1998), 68(3), 350-360

PUBLISHER: MAIK Nauka/Interperiodica Publishing

CUMENT TYPE: Journal  
NGUAGE: English

Phosphorylation of calix[4]resorcinolarenes with phosphorous mono-, di-

and triamides was studied. Factors controlling the reaction pathways and the selectivity of the formation of cavitands with phosphite and phosphoramidite moieties and calix[4]resorcinolarenes with eight phosphite or phosphoramidite moieties were revealed.

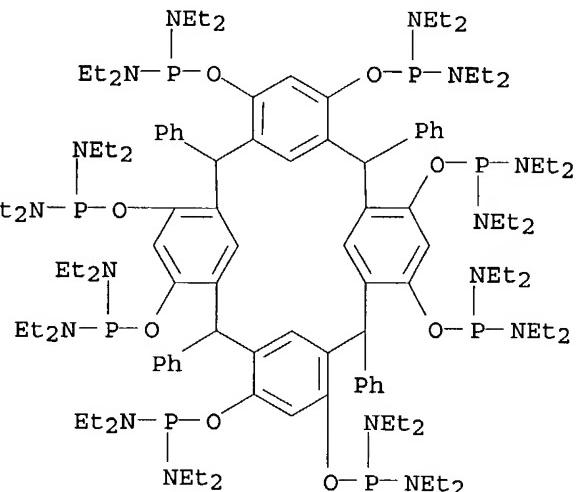
216078-73-8

RL: FMU (Formation, unclassified); RCT (Reactant); FORM (Formation, nonpreparative); RACT (Reactant or reagent)

(preparation of cavitands derived from phosphoramidites)

216078-73-8 CAPLUS

Phosphorodiamidous acid, tetraethyl-, 2,8,14,20-tetraphenylpentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octayl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

3 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ccession Number: 1998:394118 CAPLUS

Document Number: 129:128942

Title: Toner for electrostatic latent image development

Inventor(s): Ueda, Hideaki; Furukawa, Keiichi

Patent Assignee(s): Minolta Camera Co., Ltd., Peop. Rep. China

Source: Jpn. Kokai Tokkyo Koho, 21 pp.

Coden: JKXXAF

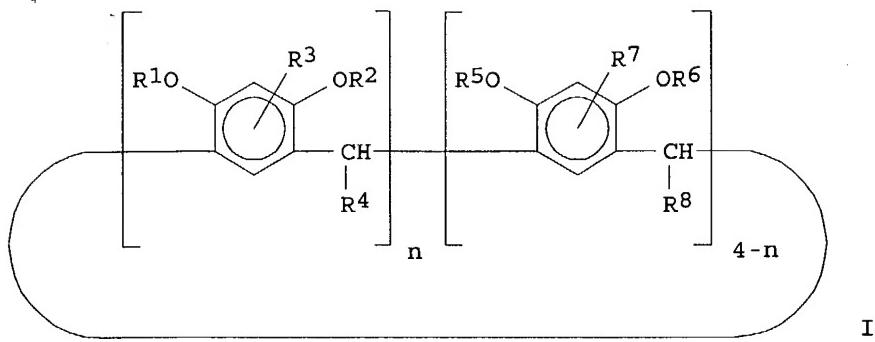
Document Type: Patent

Language: Japanese

Family Acc. Num. Count: 1

Patent Information:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10161349	A2	19980619	JP 1996-316063	19961127
Riority APPLN. INFO.:			JP 1996-316063	19961127



I

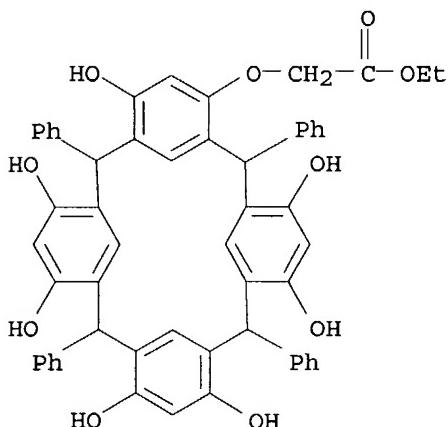
AB The title toner contains a resorcinol arene derivative I ( $R_1, R_2, R_5, R_6 = H$ ,  $C_1-5$  alkyl,  $(CH_2)_mCO_2R_9$ ;  $R_9 = H$ , lower alkyl;  $m = 1-3$ ;  $R_1, R_2, R_5$ , and  $R_6$  cannot be  $H$  in the same time;  $R_3, R_7 = H$ , halo, alkoxy, carboxylnitro, alkyl, hydroxy;  $R_4, R_8 =$  alkyl, aryl, heterocyclyl;  $n = 1-4$ ) as a charge controlling agent. The toner shows superior charge stability, resistance to heat and solvent, color reproducibility and transparency.

IT 210303-17-6

RL: TEM (Technical or engineered material use); USES (Uses)  
(charge controlling agent for electrostatog. toner)

RN 210303-17-6 CAPLUS

CN Acetic acid, [(6,10,12,16,18,22,24-heptahydroxy-2,8,14,20-tetraphenylpentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaen-4-yl)oxy]-, ethyl ester (9CI) (CA INDEX NAME)



L3 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1996:257156 CAPLUS

DOCUMENT NUMBER:

124:342828

TITLE:

Designing of resorcinol-p-hydroxybenzaldehyde tetramer  
for uranophilic activity

AUTHOR(S):

Singh, Harmit; Singh, Serjinder

CORPORATE SOURCE:

Dep. Chem., Guru Nanak Dev Univ., Amritsar, 143 005,  
India

SOURCE:

Indian Journal of Chemistry, Section B: Organic  
Chemistry Including Medicinal Chemistry (1996),  
35B(5), 409-12

CODEN: IJSBDB; ISSN: 0376-4699

PUBLISHER:

Publications & Information Directorate, CSIR

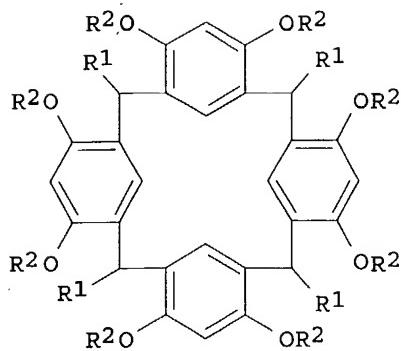
DOCUMENT TYPE:

Journal

LANGUAGE:

English

GI



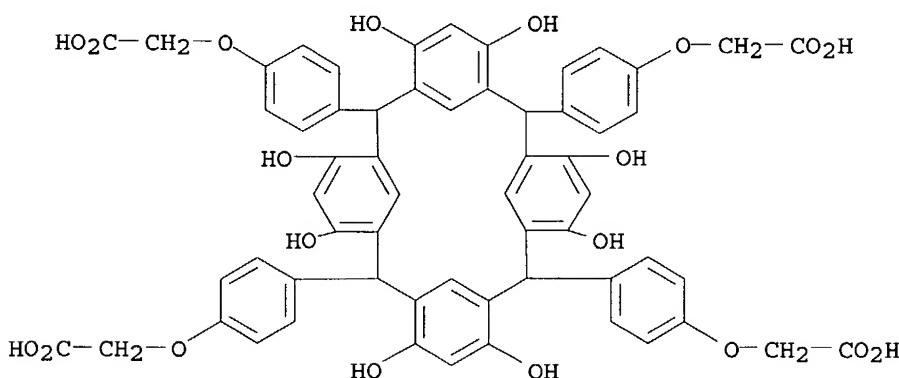
**AB** Resorcinol-p-hydroxybenzaldehyde tetramer **Ia** ( $R_1 = p\text{-C}_6\text{H}_4\text{OH}$ ,  $R_2 = \text{H}$ ) has been obtained under acidic conditions, separated into its conformations, and characterized by  $^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectra and by the preparation of its octaacetate (**Ib**;  $R_1 = p\text{-C}_6\text{H}_4\text{OAc}$ ,  $R_2 = \text{H}$ ). The direct carboxymethylation of **Ia** has been attempted with chloroacetic acid under basic conditions, but due to steric repulsions, tetramer **Ic** ( $R_1 = p\text{-C}_6\text{H}_4\text{OCH}_2\text{CO}_2\text{H}$ ,  $R_2 = \text{H}$ ) could not be obtained. By use of the reverse approach, p-hydroxybenzaldehyde is carboxymethylated first to yield  $\text{HO}_2\text{CCH}_2\text{O}-p\text{-C}_6\text{H}_4\text{CHO}$  which is then cyclized under acidic conditions to yield the tetramer **Id** ( $R_1 = p\text{-C}_6\text{H}_4\text{OCH}_2\text{CO}_2\text{Et}$ ,  $R_2 = \text{H}$ ). The coplanar arrangement of carboxylate groups in **Ic** is utilized to bind uranyl ion. The binding, as shown by a Job's plot, does not show a 1:1 **Ic**: $\text{UO}_2^{2+}$  ratio due to the fourth carboxylate group, but it acts as a good uranophile as indicated by an increase in the UV absorption intensity of  $\text{UO}_2^{2+}$  ions in the presence of **Ie** ( $R_1 = p\text{-C}_6\text{H}_4\text{OCH}_2\text{CO}_2\text{Et}$ ,  $R_2 = \text{COCH}_3$ ).

**IT** 176798-35-9P  
**RL:** RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and uranophilic activity of resorcinol-hydroxybenzaldehyde tetramer)

**RN** 176798-35-9 CAPLUS

**CN** Acetic acid, 2,2',2'',2'''-[(4,6,10,12,16,18,22,24-octahydroxypentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-2,8,14,20-tetrayl)tetrakis(4,1-phenyleneoxy)]tetrakis- (9CI) (CA INDEX NAME)



**L3** ANSWER 11 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:994163 CAPLUS

DOCUMENT NUMBER: 124:55584

TITLE: Preparation of calixarene-based compounds having antibacterial, antifungal, anticancer, and anti-HIV activity

INVENTOR(S): Harris, Stephen J.

PATENT ASSIGNEE(S): Ire.

SOURCE: PCT Int. Appl., 148 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9519974	A2	19950727	WO 1995-IE8	19950124
WO 9519974	A3	19950921		
W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, FI, GB, HU, JP, KP, LU, NO, RO, UA, US				
RW: AT, BE, CH, DE, ES, FR, GB, GR, IE, LU, NL, SE, GA, ML, NE, SN, TD, TG				
AU 9515453	A1	19950808	AU 1995-15453 IE 1994-57 WO 1995-IE8	19950124 19940124 19950124
PRIORITY APPLN. INFO.:				

THER SOURCE(S) : MARPAT 124:55584

I. For diagram(s), see printed CA Issue.

B Calixarene-based compds., which are calixarenes or exocalixarenes, acy-

calixarene-based compds., which are calixarenes or oxacalixarenes, ac. phenyl-formaldehyde oligomers, cycloetriarylene derivs., cyclic

phenyl-formaldehyde oligomers; cyclohexatriene derivs.; cyclic tetrasubstituted monocyclic aldehydes, known as Hachette compounds, and

tetrameric resorcinol-aldehyde derivs. known as Hogberg compds. and cyclic tetrameric pyrogallol-aldehyde derivs., are prepared. For example, calixarenes or oxacalixarenes are represented by general formula [I; n + m = 3-8; m = 0-3; n = 0-8; R1 = H, halo, hydrocarbyl, aryl, (un)substituted hydrocarbylaryl, NO2, SO3M1; wherein M1 = alkali metal, SO3H; R1 = OR2; wherein R2 = CH2CO2R3, CH2CO2Mp/p, CH2CONR4R5; wherein R3 = (un)substituted alkyl; M = metal, ammonium ion; p = the charge on the metal ion; R4 or R5 may be the same or different, or both may be part of amino acid ester of poly(amino acid ester) or one or more of the same or different amino acids or part of a cyclic polyene antibiotic/antifungal drug or part of a cyclic nitrogen heterocycle; X = halo, NO2, CO2H, cyano, other electron withdrawing group]. Thus, n-butyaldehyde and pyrogallol in a 1:4 mixture of 37% aqueous HCl and EtOH was refluxed under N for 90 min give a cyclic tetramer (II; R = X = H), which was brominated with Br in CHCl3 to II (R = H, X = Br) and etherified with Et bromoacetate in the presence of K2CO3 in refluxing acetone to give II (R = CH2CO2Et, X = Br). The latter compound was saponified with KOH in refluxing EtOH, acidified with aqueous HCl, and treated with 25% aqueous NH4OH to give II (R = CH2CO2-NH4+, Br). The latter compound in vitro inhibited the infection of C8166 cells with HIV-2, SIV (Simian immunodeficiency virus), and HIV-1 with EC50 of 10, 20, and 0.03  $\mu$ M.

T 171799-65-8P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU. (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of calixarene-based compds. having antibacterial, antifungal,

anticancer, and anti-HIV activity)

N 171799-65-8 CAPLUS

... , 2 ... , 2 ... - [ 25, 26, 27, 28-tetrabromo-2, 8, 14, 20-tetrakis (3-

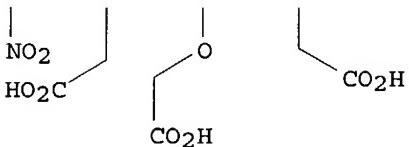
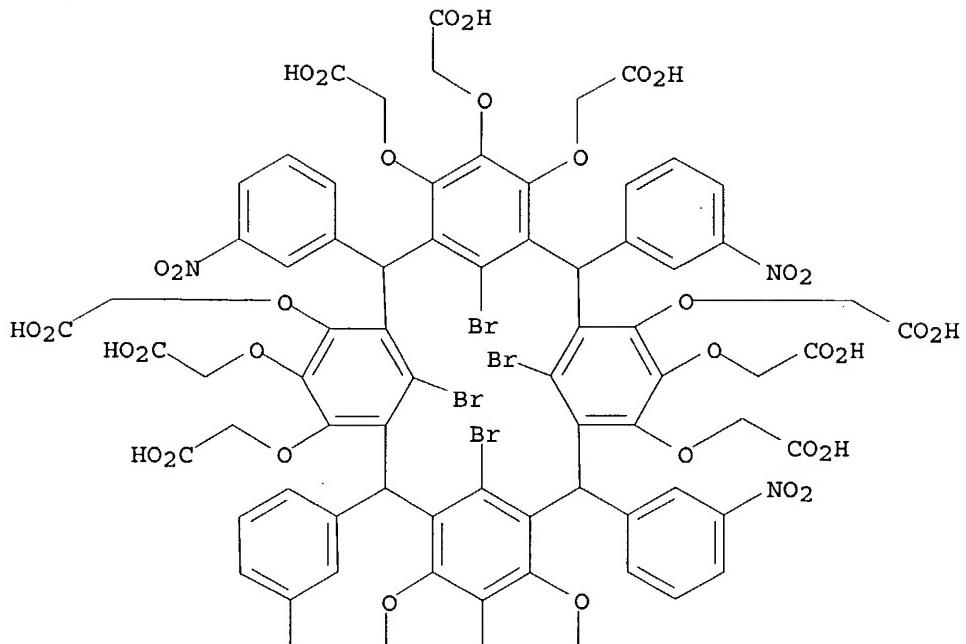
*nitrophenyl)pentacyclo[19.3.1.13.7.19]*

1(25)-3,5,7(28)-9,11,13(27)-15,17,19(26)-21-23-dodecaene-

4,5,6,10,11,12,16,17,18,22,23,4,5,6,10,11,12,16,17,18,22,23-dodecakis(oxy)1dodecakis-

4,5,6,10,11,12,13,17,18,22,23,24-dodecakis(oxy)-dodecapotassium salt (8Cl) (CA INDEX NAME)

dodecapotassium salt (9CI) (CA INDEX NAME)



●12 K

ANSWER 12 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
 CESSON NUMBER: 1995:298047 CAPLUS  
 CUMENT NUMBER: 123:169331  
 TLE: Macrocyclic  $\pi$ -Conjugated Carbopolyanions and  
 Polyradicals Based upon Calix[4]arene and  
 Calix[3]arene Rings  
 THOR(S): Rajca, Andrzej; Rajca, Suchada; Desai, Shailesh R.  
 RPORATE SOURCE: Department of Chemistry, University of Nebraska,  
 Lincoln, NE, 68588-0304, USA  
 URCE: Journal of the American Chemical Society (1995),  
 117(2), 806-16  
 CODEN: JACSAT; ISSN: 0002-7863  
 BLISHER: American Chemical Society  
 CUMENT TYPE: Journal  
 NGUAGE: English

STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Calix[4]arene- and calix[3]arene-based polyether precursors to  
 polyyradicals are synthesized.  $\pi$ -Conjugated carbanions, such as  
 calix[4]arene-based tetraanion and calix[3]arene-based trianion, are  
 prepared and studied using NMR spectroscopy and voltammetry. A 4-fold-sym.

conformer for the tetraanion and two non-interconverting conformers (3-fold- and 2-fold-sym.) for the trianion are found on the NMR time scale. Oxidation of the tetraanion gives the corresponding calix[4]arene-based S = 2 tetraradical. However, ESR spectroscopy suggests that the predominant product from oxidation of calix[3]arene-based trianion is the corresponding tiradical dimer. The related calix[3]arene-based S = 1 diradical is found to be monomeric. Addnl. characterization of octaradical I and pentaradical II, which were described in a preliminary communication, is presented.

167014-10-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and characterization of macrocyclic conjugated carbopolyanions and polypyradicals based on calixarene rings)

167014-10-0 CAPLUS

Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene, 2,8,14,20-tetrakis[4-(1,1-dimethylethyl)phenyl]-2,8,14,20-tetramethoxy- (9CI) (CA INDEX NAME)

